

**REMARKS**

Upon entry of this amendment, claims 1, 3, 4 and 6 will be amended, and claims 8-10 will be added whereby claims 1-10 will be pending. Claims 1, 4 and 8 are independent claims.

The claims have been amended to include a thixotropic ion conductive paste. Support for this subject matter appears in Applicant's originally filed application, including paragraphs [0020], [0021] and [0037]. Accordingly, the amendment to the claims should not be considered to constitute new matter.

Reconsideration and allowance of the application are respectfully requested.

**Information Disclosure Statements**

Applicants express appreciation for the inclusion with the Office Action of an initialed copy of the Form PTO-1449 submitted with the Information Disclosure Statement, filed June 10, 2005, whereby the Examiner's consideration of the Information Disclosure Statement and the information cited therein is of record.

**Objection To Specification**

In response to the objection to the abstract as including the legal phraseology "comprises", Applicant has amended the Abstract to avoid the use of the term "comprises".

Moreover, in response to the objection to the disclosure as including a run-on sentence, the specification has been amended to modify the indicated sentence.

Accordingly, this ground of objection should be withdrawn.

### **Art Based Rejections**

The following art based rejections are set forth in the Office Action:

(a) Claims 1-4 and 6 are rejected under 35 U.S.C. 102(b) as being anticipated by Kusano, U.S. Patent No. 6,508,647.

(b) Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kusano, U.S. Patent No. 6,508,647, in view of Caizza, U.S. Patent No. 6,964,737.

(c) Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kusano, U.S. Patent No. 6,508,647, in view of Enomoto et al., U.S. Patent No. 6,889,433.

In response, Applicant submits that Applicant's independent claims each include, amongst other features recited therein, a thixotropic ion conductive paste. The documents utilized in the rejections of record do not appear to disclose a thixotropic paste which can be placed on the damage tooth, and therefore none of the documents, whether taken alone or together, teaches or arrives at Applicant's disclosed and claimed subject matter. Moreover, the documents do not teach or suggest the advantages associated with Applicant's invention.

According to the present invention, the ion conductive paste contained in the syringe has sufficient thixotropic character rather than mere viscosity. A viscous liquid having only viscosity, and not thixotropy, does not have the characteristic of maintaining a layer for sufficient a time duration because such a viscous liquid flows according to its viscosity even though viscosity is high. This does not ensure the providing of a thick layer on a caries tooth. However, the thixotropic ion conductive paste according to the present invention provides thixotropic characteristics. The term "thixotropic" means

“changing viscosity with respect to movement”. A thixotropic fluid exhibits non-linear viscosity with respect to its movement; in low movements, viscosity becomes high and in high movements, the viscosity becomes low.

According to the present invention, the diagnosis of the exposed pulp can be conducted through the thick and stable layer of the ion conductive paste with the exclusion of the contact to the caries part of the damaged tooth so that severe stimulation to a patient can be prevented and unexpected additional damage onto the damaged tooth can be avoided.

Furthermore, the present invention can avoid contact to the damaged tooth and avoid unexpected damage to a healthy tooth during diagnosis of pulp exposure by contacting a hard tip of the dental needle.

Accordingly, the rejections are without appropriate basis and should be withdrawn.

Moreover, the obviousness rejection is utilizing Enomoto in an attempt to arrive at a conductive paste in a modified device of Kusano asserting that Applicant's recited viscosity would have been obvious. However, one having ordinary skill in the art would not have combined the diverse disclosures. For example, Kusano is directed to a paste formulation for dental use, a paste injector, and a system for detecting paste filling. In contrast, Enomoto is directed to a method of manufacturing a printed circuit board. The rejection does not address why one having ordinary skill in the art would look to such diverse disclosures to arrive at Applicant's claims subject matter.

Moreover, even if for the sake of argument the disclosures were combined, Applicant's claimed subject matter including a thixotropic ion conductive paste would not be present.

Accordingly, the rejections of record are without appropriate basis and should be withdrawn.

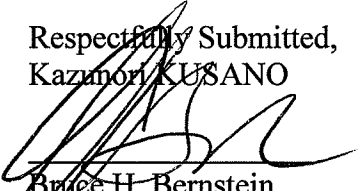
### CONCLUSION

In view of the foregoing, the Examiner is respectfully requested to reconsider and withdraw the rejections of record, and allow all the pending claims.

Allowance of the application is requested, with an early mailing of the Notices of Allowance and Allowability.

If the Examiner has any questions or wishes to further discuss this application, the Examiner is invited to telephone the undersigned at the below-listed telephone number

Respectfully Submitted,  
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August 23, 2007  
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*Approved*  
*By Mr. 33,094*